



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,478	09/15/2005	Yuji Asami	1422-0687PUS1	8134
2292	7590	08/04/2008	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				KOLLIAS, ALEXANDER C
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
08/04/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/549,478	ASAMI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	ALEXANDER C. KOLLIAS	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 02 June 2008.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-33 is/are pending in the application.  
 4a) Of the above claim(s) 17-33 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-16 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 20050915.

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election / Restriction***

1. Applicant's election without traverse of Invention I, Claims 1-16 in the reply filed on June 2<sup>nd</sup>, 2008 is acknowledged.
2. Claims 16-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 2<sup>nd</sup>, 2008.

### ***Specification***

1. The use of the trademarks U-PICA COAT GV920, FINEDIC M8034, and VESTAGON B1530 has been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 13, recites "two or more color powder coatings having different hues are within 30". However, the claim does not explicitly recite the units for the difference in color hues of the powder coatings.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klaren (US 3,842,035).

Regarding Claim 1, Klaren teaches a matter powder composition comprising a powder coating (A) comprising an acrylic or epoxy resins, a curing accelerator such as polycarboxylic acid, and a colorant (Column 2, Lines 43-54, Column 4, Lines 7-15, Lines 22-25, and Lines 75, Column 5, Lines 1-5, and Column 6, 11-17). The reference discloses that the powder coating (B) has a gelation time of 360 second to 1,800 seconds, while the gelation time of coating (B) is less than 360 second but greater than 60 second of 1,200 seconds or less (Column 3, Lines 56-60). The difference in the gelation times of coatings (A) and (B) is 300 second to 600 seconds, meeting the claimed limitation of 400 seconds or more.

It is well settled that where the prior art describes the components of a claimed compound or compositions in concentrations within or overlapping the claimed concentrations a prima facie case of obviousness is established. See *In re Harris*, 409 F.3d 1339, 1343, 74 USPQ2d 1951, 1953 (Fed. Cir 2005); *In re Peterson*, 315 F.3d 1325, 1329, 65 USPQ 2d 1379, 1382 (Fed. Cir. 1997); *In re Woodruff*, 919 F.2d 1575, 1578 16 USPQ2d 1934, 1936-37 (CCPA 1990); *In re Malagari*, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974).

Regarding Claim 14, Klaren teaches all the claim limitations as set forth above. Additionally, the reference discloses that the amount of powder coating (A) to powder coating (B) is in the ratio of 1:0.25 to 1:5, which yields a percentage of coating (B) comprising 16.7% to 83.3 % of the composition (Column 7, Lines 1-7 and Lines 54-55) . Regarding the ranges disclosed by the reference, it is well settled that where the prior art describes the components of a

claimed compound or compositions in concentrations within or overlapping the claimed concentrations a *prima facie* case of obviousness is established. See *In re Harris*, 409 F.3d 1339, 1343, 74 USPQ2d 1951, 1953 (Fed. Cir 2005); *In re Peterson*, 315 F.3d 1325, 1329, 65 USPQ 2d 1379, 1382 (Fed. Cir. 1997); *In re Woodruff*, 919 F.2d 1575, 1578 16 USPQ2d 1934, 1936-37 (CCPA 1990); *In re Malagari*, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974)

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klaren (US 3,842,035) as applied to claim 1 above, in view of Matsumoto et al (US 2002/0156226)

Regarding Claim 2, Klaren teaches all the claim limitations as set forth above. Additionally, the reference discloses that the powder coating compositions comprises an epoxy thermosetting resin and a latent curing agent such as phthalic anhydride or tetrachlorophthalic anhydride (Column 4, Line 75 and Column 5, Lines 1-9). However, the reference does not disclose that powder coating (B) comprises a blocked isocyanate.

Matsumoto et al discloses a powder composition comprising a blocked polyisocyanate as a curing agent (Abstract, Page 4, [0055]-[0056]). The reference discloses that a blocked polyisocyanate is preferred in view of storage stability and curability at low temperatures of the resin composition (Page 4, [0055]).

Given that both Klaren and Matsumoto et al are drawn to powder coating compositions containing polymers and curing agents, and, given that Klaren does not explicitly prohibit other ingredients, in light of the particular advantages provided by the use and control of the amount of blocked polyisocyanate as taught by Matsumoto et al, it would therefore have been obvious to

one of ordinary skill in the art to include such blocked polyisocyanate in the powder coating composition of Klaren with a reasonable expectation of success.

10. Claims 3-4 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klaren (US 3,842,035) as applied to claim 1 above, in view of Matsumoto et al (US 2002/0156226) and *Evonik Industries Product Information* (see attached pages)

Regarding Claims 3-4 and 9, Klaren teaches all the claim limitations as set forth above. However, the reference does not discloses a powder coating composition comprising a polyester having hydroxyl groups as a resin as a blocked isocyanate which is blocked with at least one blocking agent is methyl isobutyl ketone oxime or methyl ethyl ketone oxime.

Matsumoto et al discloses a powder coating composition comprising a polyester polyol having a hydroxyl group and an acid group such as isophthalic acid and curing agents reactive with a hydroxyl group such as a blocked polyisocyanate compounds blocked by such compounds as lactam or oxime, including such compounds as VESTANAT B1358 which are identical to curing agents used in the present invention (Abstract, Page 1, [0015], Page 2, [0016], Page 3, [0040], Page 4, [0054]-[0058] and *Evonik Industries Product Information*, Pages 1-3).

Matsumoto and *Evonik Industries Product Information* disclose that VESTANAT B1358 is a polyisocyanate which is blocked by  $\epsilon$ -caprolactam (Matsumoto et al, Page 4, [0056]-[0057] and *Evonik Industries Product Information*, Page 1).

Furthermore, Matsumoto et al discloses that a powder composition comprising such polyester resins and blocked polyisocyanates yields a resin composition which can form a

coating film having superior appearance and flexibility while maintaining storage stability  
(Abstract, Page 1, [0010]).

Given that both Klaren and Matsumoto et al are drawn to powder coating compositions containing polymers and curing agents, and given than Klaren does not explicitly prohibit other ingredients, in light of the particular advantages provided by the use and control of the amount of a resin having hydroxyl and carboxyl groups as well as blocked polyisocyanate as taught by Matsumoto et al, it would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to include such compounds in the powder coating composition of Klaren with a reasonable expectation of success.

Regarding Claims 10-11, modified Klaren teaches all the claim limitations as set forth above. Additionally, Matsumoto et al teaches a powder composition comprising a curing agent reactive with hydroxyl groups such as a blocked polyisocyanate compounds which is blocked by  $\epsilon$ -caprolactam. Additionally, the reference discloses the compound VESTANAT B 1530 (Page 4, [005]-[0056]). *Evonik Industries* product literature discloses the VESTAGON B 1530 is a polyisocyanate cross-linking adduct used in combination with hydroxy functional resins, comprising  $\epsilon$ -Caprolactam blocked NCO groups wherein the amount of blocked polyisocyanate is 14.8 to 15.7 % wt percent or 85.2 to 84.3 % of the composition is  $\epsilon$ -caprolactam (*Evonik Industries* Page 1). Regarding the amount of blocked isocyanate, Matsumoto et al discloses that the amount of blocked polyisocyanate is contained in the amount of 18.7 parts per 100 parts of the resin (Page 8, Table 3, Powder Coating P-4).

Regarding the amounts of blocked isocyanate and  $\epsilon$ -caprolactam recited in Claims 10 and 11, it would have been obvious to an ordinary skill in the art at the time the invention was made to utilize the amounts disclosed by Matsumoto et al as it is well settled that where the prior art describes the components of a claimed compound or compositions in concentrations within or overlapping the claimed concentrations a *prima facie* case of obviousness is established. See *In re Harris*, 409 F.3d 1339, 1343, 74 USPQ2d 1951, 1953 (Fed. Cir 2005); *In re Peterson*, 315 F.3d 1325, 1329, 65 USPQ 2d 1379, 1382 (Fed. Cir. 1997); *In re Woodruff*, 919 F.2d 1575, 1578 16 USPQ2d 1934, 1936-37 (CCPA 1990); *In re Malagari*, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974)

11. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klaren (US 3,842,035), Matsumoto et al (US 2002/0156226), and *Evonik Industries Product Information* (see attached pages) as applied to claims 3-4 above, and in view Itoh et al (US 4,046,727).

Regarding Claim 5, modified Klaren teaches all the claim limitations as set forth above. Klaren teaches a powder coating (B) comprising acrylic resin as the resin having an epoxy group. However, Klaren does not disclose a powder coating (B) comprising an acrylic resin having an epoxy group.

Itoh teaches all a thermosetting acrylic resin for powder coating comprising an acrylic resin with an epoxy group (Abstract). The reference discloses that the composition comprises a carboxylic acid group and the epoxy group in order to produce in the resin proper amounts of

inter molecular cross-linking which bring about improvement of the coating film in surface leveling as well as in strength and adhesion (Column 2, Lines 23-32).

Given that both modified Klaren and Itoh are drawn to thermosetting powder coating compositions comprising resins and carboxylic acids, and, given that modified Klaren does not explicitly prohibit other ingredients, in light of the particular advantages provided by the use and control of the amount of an acrylic resin having an epoxy group as taught by Ito et al, it would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to include such compounds in the composition of modified Klaren with a reasonable expectation of success.

Regarding claim 8, modified Klaren teaches all the claim limitations as set forth above. However, modified Klaren does not explicitly disclose that the epoxy group has a hexane tolerance from 3.0 to 8.5. However, this limitation is expected to be present in modified Klaren because the acrylic resin recited in modified Klaren is similar in composition to the epoxy group claimed in the instant application. “Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established.” *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977).

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klaren (US 3,842,035), Matsumoto et al (US 2002/0156226), and *Evonik Industries Product Information*

(see attached pages) as applied to claims 3-4 above, and in view Itoh et al (US 4,046,727) and Okada et al (WO 2001/072916, see English language equivalent US 2003/0083402).

Regarding Claim 7, modified Klaren teaches all the claim limitations as set forth above. However, modified Klaren does not disclose that the acrylic resin having an epoxy resin has a weight average molecular weight of 5,000 to 100,000 and an epoxy equivalence from 250 to 600 g/mol.

Itoh et al teaches all a thermosetting acrylic resin for powder coating comprising an acrylic resin with an epoxy group and that the acrylic resin has a molecular weight of 8,000 to 100,000 (Column 2, Lines 11-23).

Given that modified Klaren and Itoh et al are drawn to powder coating compositions comprising acrylic resins with epoxy groups, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the powder coating composition of modified Klaren to include an acrylic resin with the average molecular weight as disclosed by Itoh et al as it is well settled that where the prior art describes the components of a claimed compound or compositions in concentrations within or overlapping the claimed concentrations a *prima facie* case of obviousness is established. See *In re Harris*, 409 F.3d 1339, 1343, 74 USPQ2d 1951, 1953 (Fed. Cir 2005); *In re Peterson*, 315 F.3d 1325, 1329, 65 USPQ 2d 1379, 1382 (Fed. Cir. 1997); *In re Woodruff*, 919 F.2d 1575, 1578 16 USPQ2d 1934, 1936-37 (CCPA 1990); *In re Malagari*, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974).

Modified Klaren teaches all the claim limitations as set forth above. However, the reference does not explicitly discloses that the acrylic resin has an epoxy equivalence of 250 to 600 g/mol.

Okda et al teaches a powder coating composition comprising an epoxy acrylic resin with an epoxy equivalences of 385 and 480 (Page 10, Page 9, Example 5, [0099] and Example 11, [0109])

Given that modified Klaren and Okada et al are drawn to powder coating compositions comprising acrylic resins with epoxy groups, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the powder coating composition of modified Klaren to include an acrylic resin with epoxy equivalence disclosed by Okada et al as it is well settled that where the prior art describes the components of a claimed compound or compositions in concentrations within or overlapping the claimed concentrations a *prima facie* case of obviousness is established. See *In re Harris*, 409 F.3d 1339, 1343, 74 USPQ2d 1951, 1953 (Fed. Cir 2005); *In re Peterson*, 315 F.3d 1325, 1329, 65 USPQ 2d 1379, 1382 (Fed. Cir. 1997); *In re Woodruff*, 919 F.2d 1575, 1578 16 USPQ2d 1934, 1936-37 (CCPA 1990); *In re Malagari*, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974)

13. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klaren (US 3,842,035), Matsumoto et al (US 2002/0156226), and *Evonik Industries Product Information* (see attached pages) as applied to claim 4 above, and in view of Ito et al (US 5,439,896).

Regarding Claim 6, modified Klaren teaches all the claim limitations as set forth above. However, modified Klaren does not disclose that the compounds comprising dodecane dicarboxylic acid and an acrylic resin have an acid value of 200 mg KOH/g or more.

Ito et al teaches a composition comprising a thermosetting powder coating comprising a polymer containing cross-linkable groups such as hydroxy and carboxyl groups (Column 4,

Lines 17-24). Furthermore, the reference discloses curing agents such as aliphatic carboxylic acids such as dodecane dicarboxylic acid, as well as polyesters having an acid value of 10 to 300 mg KOH/g (Column 8, Lines 15-40). Furthermore, the reference discloses that if the hydroxyl value is too small, the coating film may have poor properties due to the deficiency in the cross-linking density and when the hydroxyl value is too large, the flexibility of the coating film may be decreased due to the excessive high cross-linking density (Column 6, Lines 19-29).

Given that both modified Klaren and Ito et al are drawn to powder coating compositions containing polymers and curing agents, and, given that Klaren does not explicitly prohibit other ingredients, in light of the particular advantages provided by the use and control of the amount of dodecanedicarboxylic acid and polyesters having an acid value of 10 to 300 mg KOH/g as taught by Ito et al, it would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to include such compounds in the powder coating of modified Klaren with a reasonable expectation of success

14. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klaren (US 3,842,035) as applied to claim 1 and in view of Itakura et al (US 6,146,145).

Regarding Claims 12-13, Klaren teaches all the limitations as set forth above. However, the reference does not teach that powder coating (A) comprises two more kinds of color coatings having different hues. Furthermore, the reference does not disclose that the differences in lightness of the two or more color powder coatings having different hues are within 30.

Itakura et al teaches a powder coating comprising a plurality of colors which are added to the powder coating composition for color matching (Abstract, Column 3, Lines 55-67 and

Column 4, Lines 1-9). Furthermore, the reference discloses that a variety of cyan, magenta, and yellow pigments can be used, thus meeting the limitation that the color powder coatings have different hues (Column 4, Lines 1-9).

The reference does not explicitly disclose that the difference of the two or more color powder coatings is within 30. However, given that Klaren teaches a powder coating composition comprising pigment and Itakura et al discloses a powder coatings comprising a variety of different colors and hues it would have been obvious to one of ordinary skill in the art at the time the invention was made to augment the powder coating of Klaren to include a variety of colors, as well as different hues of the same color as taught by Itakura et al, as doing so would amount to nothing more than use of known composition for its intended use, in a known environment to accomplish entirely expected results.

15. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klaren (US 3,842,035) as applied to claim 1 and in view of Satoh et al (EP 0,950,694).

Regarding Claim 15, Klaren teaches all the limitations as set forth above. However, the reference does not disclose that the powder coating (B) has an average particle size of 25  $\mu\text{m}$  or less and the difference in the particle sizes between (A) and (B) is within  $\pm 15\%$ .

Satoh et al teaches a thermosetting powder coating composition comprising curing agents, pigments, and resins. Furthermore, the reference discloses that the average particle size of powders (A) and (B) is 5 to 30  $\mu\text{m}$  (Page 7, [0068]). If the size of the particles is less than 5  $\mu\text{m}$ , reduced transfer efficiency may result, whereas if the particle size is greater than 30  $\mu\text{m}$ , the particle when formed into a filed may provide a poor surface smoothness (Page 7, [0068]).

It is the examiner's position that the average particle size of coatings (A) and (B) are result effective variables because changing them will clearly affect the type of product obtained. See MPEP § 2144.05 (B). Case law holds that "discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art." See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In view of this, it would have been obvious to one of ordinary skill in the art to utilize appropriate particle sizes, including those within the scope of the present claims, so as to produce desired end results.

16. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klaren (US 3,842,035) as applied to claim 1 and in view of Shiomi et al (US 5,523,349).

Regarding Claim 16, Klaren teaches all the limitations as set forth above. However, the reference does not disclose that the powder coating (B) has a standard deviation of the particles size of 20  $\mu\text{m}$  or less.

Shiomi et al teaches a powder coating composition comprising an acrylic resin and surface modifier such that the powder coating composition preferably has a volume average particle size of 5 to 50  $\mu\text{m}$ , more preferably 8 to 40  $\mu\text{m}$  (Column 1, Lines 57-67, Column 2 Lines 54-62, and Column 5, Lines 11-22). Regarding the particle size, the reference discloses that when the average particle size is in the range of 5 to 20  $\mu\text{m}$ , particles of not more than 5  $\mu\text{m}$  in size are preferably at a rate of not more than 25 % by weight. On the other hand, when the average particle size is in the range of 20 to 50  $\mu\text{m}$  the standard deviation of particle size distribution is preferably not more than 20  $\mu\text{m}$  (Column 5, Lines 11-22).

Given that Klaren and Shiomi et al are drawn to powder compositions comprising polymers such as acrylic resins and carboxylic acids, in view of particle sizes and their standard deviations as disclosed by Shiomi et al, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the powder composition of Klaren and augment the particle size of the composition to that disclosed by Shiomi et al, as doing so would amount to nothing more than use of known composition for its intended use, in a known environment to accomplish entirely expected results.

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1 and 10 of copending Application No. 11/344,009 in view of Klaren (US 3,842,035).

Claims 1 and 10 of copending Application No. 11/344,009 recite a powder coating composition comprising a pigment a thermosetting powder and an epoxy resin.

While the claims in both applications are open to the inclusion of additional ingredients (cf. the use of "comprising" in the claims), it is noted that Claims 1 and 10 of copending Application No. 11/6344,009 lack a gelation time of powder coating (B) is less than 1200 second and the difference in the gelation time of the powder coating (B) and (a) is 400 second or more.

Klaren teaches a matter powder composition comprising a powder coating (A) comprising an acrylic or epoxy resins, a curing accelerator such as polycarboxylic acid, and a colorant (Column 2, Lines 43-54, Column 4, Lines 7-15, Lines 22-25, and Lines 75, Column 5, Lines 1-5, and Column 6, 11-17). The reference discloses that the powder coating (B) has a gelation time of 360 second to 1,800 seconds, while the gelation time of coating (B) is less than 360 second but greater than 60 second of 1,200 seconds or less (Column 3, Lines 56-60). Furthermore, the reference discloses that difference in gelation time can be adjusted in order to obtain a powder coating composition which can have a silk-like appearance to a matt or semi-semi-matt appearance (Column 3, Lines 60-70).

Given that powder coating compositions comprise thermosetting and epoxy resin as well as pigment, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the composition of copending U.S. application 11/344,009 and adjust the gelation time difference as disclosed by Klaren and thereby arrive at the currently claimed invention.

This is a provisional obviousness-type double patenting rejection.

***Conclusion***

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER C. KOLLIAS whose telephone number is (571)-270-3869. The examiner can normally be reached on Monday-Friday, 8:00 AM -5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571)-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. C. K./  
Examiner, Art Unit 1796

/VASUDEVAN S. JAGANNATHAN/  
Supervisory Patent Examiner, Art Unit 1796